

REMARKS

This is intended as a full and complete response to the Office Action dated August 30, 2005, having a shortened statutory period for response set to expire on November 30, 2005. Please reconsider the claims pending in the application for reasons discussed below.

In the specification, the paragraphs [0007], [0021], [0022] and [0025] have been amended to correct minor editorial problems.

In amended Figure 3, previously labeled element 36 has been changed to 43. In amended Figure 4 the previously omitted element numeral 98 has been added.

Claims 1 - 24 remain pending in the application and are shown above. Claims 1-24 are rejected by the Examiner. Reconsideration of the rejected claims is requested for reasons presented below.

Claims 5, 6, 18, and 23 are amended to correct matters of form. These amendments are not presented to distinguish a reference, thus, the claims as amended are entitled to a full range of equivalents if not previously amended to distinguish a reference.

Drawings

The drawings are objected to as failing to comply with 37 C.F.R. § 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 22, 58, and 98.

Paragraph [0021] included reference to 22 which has been changed to 18.

Reference number 98 has been added to Figure 4, and 79 has been removed.

Paragraph [0025] included reference to 58 which has been changed to 54.

The drawings are objected to as failing to comply with 37 C.F.R. § 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 79. Applicant has removed element 79 from Figure 4.

The drawings are objected to as failing to comply with 37 C.F.R. § 1.84(p)(4) because reference character "36" has been used to designate both an outlet and a vane

(see Fig.3). Figure 3 has been amended to show the vanes or blades as 43. Having corrected the drawing, Applicant respectfully requests withdrawal of the objections to the Figures.

Specification

The disclosure is objected to because of the following informalities: in the next to last line of paragraph [0007], the recitation of "they are compromises" should most likely be --there are compromises--. Applicant has corrected this typographical error, thus removal of the objection is requested.

The disclosure is objected to because of the following informalities: the recitation of "lowestmost" at the top of page 9 and at the beginning of paragraph [0022] should most likely be --lowermost--. Applicant has corrected this typographical error, thus removal of the objection is requested.

In addition, it is stated in paragraph [0021] that the uppermost outlet of the pump is sealingly engaged and in fluid communication with the inner circumference of sleeve 54. Analysis of Figure 2 leads one to believe that the outlet 40 is in communication with the annulus defined by tubing 50 and sleeve 54. It appears that if the outlet were to be in communication with the inner circumference of sleeve 54, then the system would fail because either the produced fluids would not be able to exit or the dampening capabilities would be diminished or destroyed. Applicant has corrected paragraph [0022] so that the outlet 40 is ported to the tube 50, therefore Applicant respectfully request removal of the objection.

Claim Objections

Claims 1, 5-6, 12, 14, 18, 21, and 23 are objected to because of the following informalities: the recitations of "the centrifugal pump," "said drive motor," and "said motor" in claim 1 lacks antecedent basis. Claim 1 has been amended, centrifugal has been removed, drive motor has been changed to drive member therefore claim 1 has the proper antecedent basis. The recitation of "said lubricant" in claim 5 lacks antecedent basis. Claim 5 has been amended to correct this error by changing

lubricant to dampening element which has the proper antecedent basis. The recitation of "said drive means" in claim 6 lacks antecedent basis. Claim 6 has been amended to read drive member, which has the proper antecedent basis. The recitation of "said production sleeve" in claim 12 lacks antecedent basis. Claim 12 has been amended and production has been removed, thus the claim has the proper antecedent basis. In claim 14, the recitation of "extending an energy transfer mechanism" should be --extending the energy transfer mechanism-- because the mechanism has already been introduced; the recitation of "an energy transfer member" in claim 14 should be --the energy transfer mechanism--, Applicant has amended the claim accordingly. In claim 18, the recitation of "the drive rod" lacks antecedent basis. Accordingly, claim 18 has been amended, the amended claim has the proper antecedent basis. In the preamble of claim 21, the recitation of "said excursion prevention mechanism" should be --said excursion prevention element--. Applicant has amended the claim accordingly. The recitation of "therewith" after "therebetween" should be --the pump outlet--, unless another outlet in addition to the one of claim 19 is being claimed, Applicant has amended claim 21. The recitation of "said sleeve" in claim 23 lacks antecedent basis, accordingly claim 23 has been amended so that the claim has the proper antecedent basis. Applicant respectfully requests removal of the objections and allowance of the claims.

Claim Rejections Under 35 U.S.C. § 102

Claims 1-2, 4, 7-19, and 21-24 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. patent 1,504,658 to *Ulmer*.

Regarding claim 1, 8, *Ulmer* discloses a turbine pump, having a "lower bearing arranged on an order reverse of that of the upper bearing." (Col. 3, In. 63-65). As seen in Figure 1, *Ulmer* has two helix configurations for pumping fluid 27 and 36, the upper helix 27 pushes fluid upward, while the lower helix 26 pushes fluid in the opposite direction. Therefore *Ulmer* does not teach, show, or suggest the pump having two or more housings in series, each housing having one or more impellers and an outlet, the outlet of each housing coupled to the next housing in the series, the impellers

configured increase the pressure of the fluids as the fluids exit each housing as disclosed in amended claim 1 and claims 2-7 which depend therefrom. Thus, Applicant submits that claims 1-7 are in condition for allowance.

Further, *Ulmer* does not teach, show or suggest the pump comprises a series of impellers coupled together on a central axis, the lowermost impeller having an inlet for fluids to enter the pump and the uppermost impeller having an outlet for the fluids to exit the pump, wherein a pressure of the fluids is increased progressively by each impeller as disclosed in amended claim 8 and claims 9-13 which depend therefrom.

Further, *Ulmer* does not teach, show or suggest pumping fluids from the wellbore by rotating a series of impellers in the pump and increasing the pressure of the fluids as the fluid passes each impeller as disclosed in amended claim 14 and claims 15-18 which depend therefrom.

Further, *Ulmer* does not teach, show or suggest each succeeding impeller having an intake coupled to an exhaust of the previous impeller as disclosed in amended claim 19 and claims 20-24 which depend therefrom.

Claims 1, 4, 7-8, 10-14, and 18 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. patent application publication to *Michael, et al.*

Regarding claim 1, 8, and 14, *Michael, et al.* discloses a downhole disposal apparatus and methods. The apparatus and method mentions that it may be connected to a pump D, however, the pump D contemplated is not stackable and does not disclose more than one impeller.

Therefore, *Michael, et al.* does not teach, show, or suggest the pump comprises two or more housings in series, each housing having one or more impellers as disclosed in amended claim 1 and claims 2-7 which depend therefrom. Thus, Applicant submits that claims 1-7 are in condition for allowance.

Further, *Michael, et al.* does not teach, show or suggest the pump comprises a series of impellers coupled together on a central axis, the lowermost impeller having an inlet for fluids to enter the pump and the uppermost impeller having an outlet for the fluids to exit the pump, wherein a pressure of the fluids is increased progressively by

each impeller as disclosed in amended claim 8 and claims 9-13 which depend therefrom.

Further, *Michael, et al.* does not teach, show or suggest pumping fluids from the wellbore by rotating a series of impellers in the pump and increasing the pressure of the fluids as the fluid passes each impeller as disclosed in amended claim 14 and claims 15-18 which depend therefrom.

Claim Rejections Under 35 U.S.C. § 103

Claims 3, 6, and 20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Ulmer*.

Regarding claims 3 and 6 as stated above Applicant submits that claim 1 is in condition for allowance and thus claims 3 and 6 which depend therefrom are also in condition for allowance.

Regarding claim 20 as stated above Applicant submits that claim 19 is in condition for allowance and thus claim 20 which depends therefrom is also in condition for allowance.

Claims 3 and 6 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Michael, et al.*


Regarding claims 3 and 6 as stated above Applicant submits that claim 1 is in condition for allowance and thus claims 3 and 6 which depend therefrom are also in condition for allowance.

Conclusion

The secondary references made of record are noted. However, it is believed that the secondary references are no more pertinent to the Applicant's disclosure than the primary references cited in the office action. Therefore, Applicant believes that a detailed discussion of the secondary references is not necessary for a full and complete response to this office action.

Having addressed all issues set out in the office action, Applicant respectfully submits that the claims are in condition for allowance and respectfully request that the claims be allowed. In conclusion, the references cited by the Examiner, alone or in combination, do not teach, show, or suggest the invention as claimed.

Respectfully submitted,



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IN THE DRAWINGS:

The attached sheet of drawings includes changes to Fig. 2. This sheet, which includes Figs. 1-2, replaces the original sheet including Figs. 1-2. In Figure 2, previously omitted element 13 has been added.

Attachment: **Replacement Sheet**
 Annotated Sheet Showing Changes

FIG. 3

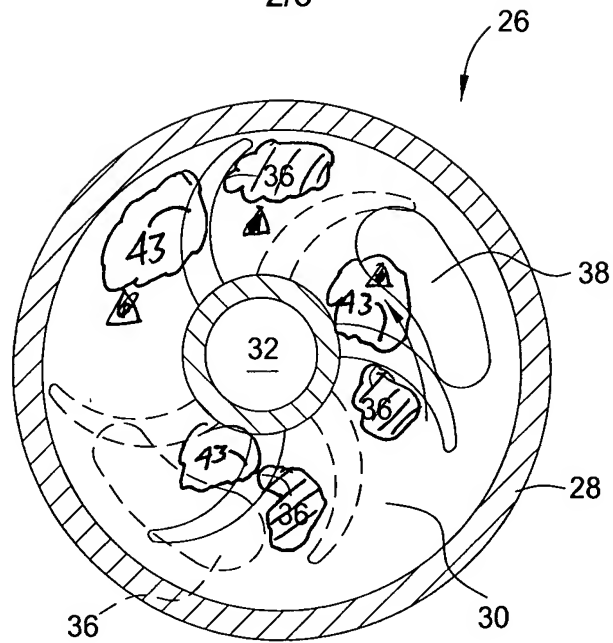
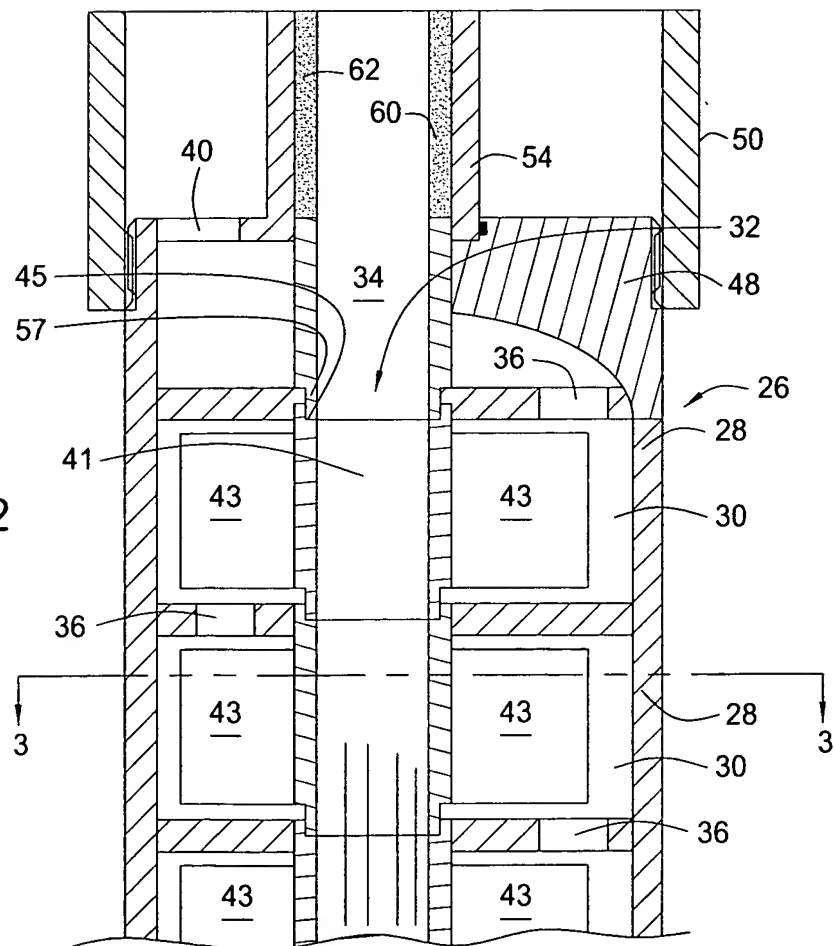


FIG. 2



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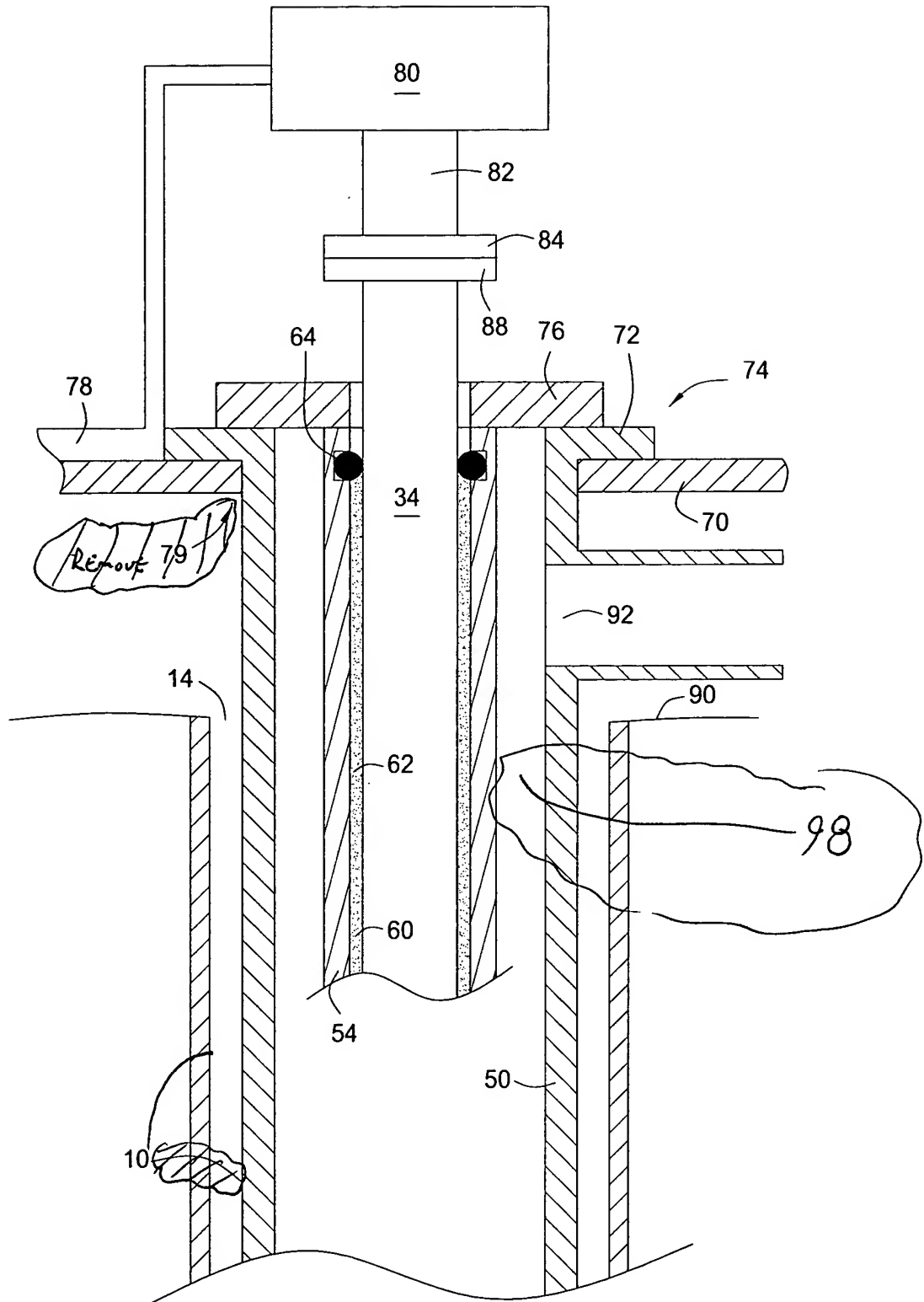


FIG. 4